

**ARMY NATIONAL GUARD  
FY06 UFR'S**

**15 January 2005**

**SUBJECT:** SINCGARS  
**FY06 UFR:** \$414M  
**APPN:** OPA  
**AREA OF INTEREST:** MODERNIZATION

**DESCRIPTION:** Provides commanders with a highly reliable, secure, easily maintained combat net radio with voice and data handling capability, in support of command and control operations.

**ISSUE JUSTIFICATION:** One of the top ARNG equipping priorities is to purge the ARNG of its remaining (obsolete) VRC-12 series radios and replace them with SINCGARS. The VRC-12 series radios cannot operate in the frequency-hopping mode. The VRC-12 radios cannot transfer data via the tactical Intranet. Units with VRC-12 series radios are not deployable across the spectrum of operations because all other units in the Army would have to operate with severely degraded communications to maintain C3 interoperability with these ARNG units. If not funded the ARNG will have to wait until the Joint Tactical Radio System (JTRS) fielding starts in FY 07 for the cascade of SINCGARS from the AC to begin the purge the VRC-12 series radios from the force. Fielding of these cascaded systems would likely not occur till FY 08.

**PROGRAM STATUS:** The Army National Guard requires an additional 37,633 SINCGARS radios to complete fielding of this system. The total ARNG requirement for SINCGARS is 90,379 radio sets. Currently, the ARNG has 34,833 SINCGARS **on hand** and 17,913 **programmed**. **The increase in the numbers is because of the Army's termination of the cascade program.**

**IMPACT OF FUNDING THE CAPABILITY:** Funding this system will allow the Army National Guard to communicate and operate within the network-centric Army Transformation. This capability will allow all our units the ability to deploy and be interoperable with Active Component Legacy and Interim Forces across the spectrum of operations.

*(Include for internal ARNG coordination/use only)*

**SUBJECT:** SINCGARS

**APPN:** OPA

**APE:**

**MDEP:**

**MDEP TITLE:**

**DAMO-ZR 1-N List Priority Number:**

**Division Priority:**

**Functional POC:** MAJ Hodson **Div:** ARQ-G **Tel:** 607-7830

**Approval Authority:** COL Moore / NGB-ARQ / 703-607-7804

\$M	FY05	FY06
Validated Requirement	522.8M	456.5M
Unvalidated Requirement	0	0
Total Requirement	522.8M	456.5M
Funded Amount	66.3M	42.5M
Total UFR	456.5M	414M

**ANALYSIS:**

SINCGARS	VRC-12
<ul style="list-style-type: none"><li>• Digital Data Capability</li></ul>	<ul style="list-style-type: none"><li>• Electromechanical</li></ul>
<ul style="list-style-type: none"><li>• SINCGARS versions ¼ to ½ the size of the VRC-12.</li></ul>	<ul style="list-style-type: none"><li>• Overheats</li></ul>
<ul style="list-style-type: none"><li>• More than double the channels in congested frequency spectrum</li></ul>	<ul style="list-style-type: none"><li>• Difficulty maintaining frequency alignment</li></ul>
<ul style="list-style-type: none"><li>• High reliability (1250 hours)</li></ul>	<ul style="list-style-type: none"><li>• ~ 200-400 hour Mean Time Before Failure</li></ul>
<ul style="list-style-type: none"><li>• Integrated COMSEC (ICOM)</li></ul>	<ul style="list-style-type: none"><li>• Parts availability</li></ul>
<ul style="list-style-type: none"><li>• Less weight</li></ul>	<ul style="list-style-type: none"><li>• Parts obsolete</li></ul>
<ul style="list-style-type: none"><li>• Frequency hopping (anti-jam)</li></ul>	<ul style="list-style-type: none"><li>• Vulnerable to jamming</li></ul>
<ul style="list-style-type: none"><li>• Less vulnerable to DF</li></ul>	<ul style="list-style-type: none"><li>• Vulnerable to DF</li></ul>
<ul style="list-style-type: none"><li>• Much less costly to maintain</li></ul>	<ul style="list-style-type: none"><li>• Costly to sustain</li></ul>

To complete fielding of the ARNG Divisions (38<sup>th</sup>, 40<sup>th</sup> and 42d, minus the elements they will deploy to Bosnia), the ARNG must procure approximately 17,913 SINCGARS radios because the Army will not cascade any additional SINCGARS to the ARNG.

**\*Note: Changes in requirements and unit costs due to the on-going design of the Modular Force require this information paper be updated periodically. Next analysis and update will occur in early March 05.**